WHAT IS CLAIMED IS:

1. A method of constructing a database for managing manufacturing engineering information comprising:

defining a set of products having a collection of attributes of use which are arbitrarily predetermined as a series product; and

defining each product contained in said series product by a collection of values of said attributes of use.

2. The method according to claim 1, wherein all of the products of the series product have common specifications.

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- 3. The method according to claim 1, wherein the attributes of use include at least one of shape, grain, and function.
- 4. The method according to claim 1, wherein each different one of the products of the series product is defined by having a different value for at least one of said attributes of use.
- 5. The method according to claim 1, wherein the products of the series product have a number of different attributes of use within a range from 10 to 20.

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- 6. The method according to claim 1, further comprising:

 setting manufacturing series activities for achieving

 particular values of the individual attributes of use; and

 deriving a manufacturing process for a particular

 product of the series product by arranging said manufacturing

 series activities in a prescribed sequence.
- 7. The method according to claim 6, wherein when at least one of the attribute values of the particular product is left undetermined, the manufacturing process is derived using a default value with respect to the at least one undetermined attribute value

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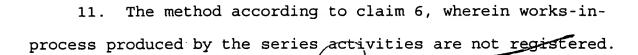
- 8. The method according to claim 6, wherein said series activities include at least one of welding, polishing and assembling.
- 9. The method according to claim 6, wherein parts to be used in the manufacturing process are determined in accordance with the set series activities.
- 10. The method according to claim 6, further comprising:

 deriving a manufacturing process for a new product from

 parts used in the series activities; and

 carrying out retrieval of the parts recursively.

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12. The method according to claim 6, wherein works-in-process produced by the series activities are automatically synthesized.

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13. A method of constructing a database for managing manufacturing engineering information comprising:

representing a by product using a set of values of attributes of use, said by-product being produced by manufacturing series activities and excluding works-in-process produced by said manufacturing series activities; and managing the by-product as a product.

14. A recording medium having stored thereon a computer program for constructing a database for managing manufacturing engineering information, said computer program comprising:

program code means for enabling a computer to define a set of products having a collection of attributes of use which are arbitrarily predetermined as a series product; and

program code means for defining each product contained in said series product by a collection of values of said attributes of use.

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15. A manufacturing engineering information management system comprising:

attribute value storing means storing values of attributes of use which are arbitrarily predetermined, and a set of products having a collection of said attributes of use;

activity storing means for storing activities which may be applied to achieve said values of said attributes of use, as well as time and physical resource data required by said activities; and

manufacturing engineering information management means for managing a manufacturing process of a particular product of the set of products based on said stored activities, and for managing parts or manufacturing steps of said particular product based on said stored time and physical resource data required for said activities.